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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,828	03/12/2004	Bradley M. Hiben	CM06186H	8521
22917	7590	05/17/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			MATTIS, JASON E	
			ART UNIT	PAPER NUMBER
			2665	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/799,828

Applicant(s)

HIBEN ET AL.

Examiner

Jason E. Mattis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/12/04</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because of the following informalities: The item numbers in Figure 8 are not consistent with the description of the Figure 8 on page 5 of the specification. For example, the description on page 5 describes first packet 804 and bursts 806 and 808; however, these item numbers are not found in Figure 8.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. The term "substantially similar" in claims 1, 3, 5, and 13 is a relative term which renders the claim indefinite. The term "substantially similar" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 3-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Veintimilla (U.S. Pat. 6084932).

With respect to claim 3, Veintimilla discloses a method in a wireless communication system **(See the abstract of Veintimilla for reference to a method for a wireless discrete multitone spread spectrum communication system)**.

Veintimilla also discloses receiving a burst comprising a payload and a synchronization field **(See the abstract of Veintimilla for reference to a remote station receiving a message from a base station including a synchronization symbol pattern)**.

Veintimilla further discloses selecting a target pattern dependent on an operating mode and comparing the received synchronization pattern against the target synchronization pattern **(See the abstract of Veintimilla for reference to comparing an extracted synchronization symbol pattern with a reference symbol pattern, which is a target synchronization pattern that the remote station expects to receive in an outbound channel from the base station)**. Veintimilla also discloses processing the payload if the synchronization pattern is similar to the target pattern and discarding the burst otherwise **(See the abstract of Veintimilla for reference to processing traffic signals received from the base station if the comparing is successful and for reference to not processing the signals if the comparing is not successful)**.

With respect to claim 4, Veintimilla discloses that the operating mode is the expectation of an outbound channel **(See the abstract of Veintimilla for reference to the operating mode that the remote station expects to receive a synchronization**

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pattern from being an outbound message receiving mode for receiving data from the base station).

6. Claims 5, 7, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Gfeller et al. (U.S. Pat. 6643469).

With respect to claim 5, Gfeller et al. discloses a method in a wireless communication system **(See column 3 lines 24-51 of Gfeller et al. for reference to a method in a wireless optical communication system)**. Gfeller et al. also discloses receiving a synchronization field that comprises a synchronization pattern **(See column 3 lines 24-51 of Gfeller et al. for reference to receiving RTS and CTS frames that comprise a SYNC field, which is a synchronization field that comprises a synchronization pattern)**. Gfeller et al. further discloses comparing the received synchronization pattern against a first and second known synchronization pattern, selecting a first operating mode if the received pattern is similar to the first pattern, and selecting a second operating mode if the received pattern is similar to the second pattern **(See column 4 lines 9-39 of Gfeller et al. for reference to comparing the SYNC field received against an expected pattern and an inverted SYNC field pattern, operating in a Rate Reduction (RR) mode of 16 if the expected pattern is received, and operating in a RR mode of 4 if the inverted pattern is received)**.

With respect to claim 7, Gfeller et al. discloses that the first and second known synchronization patterns have a common length **(See column 4 lines 35-39 of Gfeller**

et al. for reference to the SYNC field of the first pattern being inverted to form a second pattern, meaning that the patterns are the same length).

With respect to claim 10, Gfeller et al. discloses that the first operating mode is an inbound channel (See column 4 lines 35-39 of Gfeller et al. for reference to the RR mode of the RTS frames sent from the sending station on an inbound channel being signaled).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gfeller et al. in view of Pucheu-Marque (U.S. Pub. US 2002/0089948 A1).

With respect to claim 6, Gfeller et al. does not disclose using a synchronization pattern defined in ANSI.102.BAAA.

With respect to claim 6, Pucheu-Marque, in the field of communications discloses communicating using a frame structure as defined by TIA/EIA-102.BAAA (See page 4 paragraph 43 of Pucheu-Marque for reference to using a frame structure, which includes a synchronization pattern as defined by TIA/EIA-102.BAAA).

Using a synchronization pattern defined in ANSI.102.BAAA has the advantage of using a pattern that adheres to a known industry wireless communication standard.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Pucheu-Marque, to combine using a synchronization pattern defined in ANSI.102.BAAA, as suggested by Pucheu-Marque, with the method of Gfeller et al., with the motivation being to use a pattern that adheres to a known industry wireless communication standard.

Allowable Subject Matter

9. Claims 1-2, 8-9, and 11-17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

10. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowable since the prior art of record fails to teach or suggest determining whether to process a payload as voice or as non-voice based on a synchronization pattern sent with the payload. The closest prior art of record, Gfeller et al., discloses determining a rate reduction operating mode based on a synchronization pattern sent with data, but does not disclose determining whether to process a payload as voice or data.

Claim 2 is allowable since it depends on allowable claim 1.

Claim 8 is allowable since the prior art of record fails to teach or suggest selecting a full-length burst or shortened-length burst operating mode based on a synchronization pattern sent with data. The closest prior art of record, Gfeller et al., discloses determining a rate reduction operating mode based on a synchronization pattern sent with data, but does not disclose selecting a full-length burst or shortened-length burst mode.

Claim 9 is allowable since it depends on allowable claim 8.

Claims 11 and 13 are allowable since the prior art of record fails to teach or suggest identifying or processing a burst as either inbound or outbound based on a synchronization pattern. The closest prior art of record, Gfeller et al., discloses determining a rate reduction operating mode based on a synchronization pattern sent with data, but does not disclose identifying or processing a burst as either inbound or outbound.

Claim 12 is allowable since it depends on allowable claim 11.

Claims 14-17 are allowable since they depend allowable claim 13.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. MacLellan et al. (U.S. Pat. 5929779) discloses signaling an operating mode using a synchronization signal. Rodgers (U.S. Pat. 6400751) discloses using a synchronization pattern that is indicative of a frequency operation mode. Chen et al. (U.S. Pub. US 2004/0228270 A1) discloses determining the OFDM mode of a signal using synchronization pattern matching. Lakkis (U.S. Pub. 2005/0047367 A1) discloses adjacent base stations using different synchronization codes to identify messages sent from them.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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